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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/006,045

12/04/2001

Eric Rosen

010561

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23696

7590

04/22/2004

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

LELE, TANMAY S

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,045

Applicant(s)

ROSEN ET AL.

Examiner

Tanmay S Lele

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 January 2004 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 – 60 have been considered but are moot in view of the new ground(s) of rejection.

Specification

3. The use of the trademarks GLOBALSTAR, IRIDIUM, and SUN WORKSTATION NERA T1 have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1 –3, 5 –8, 10, 11, 14 –16, 18 –21, 23, 24, 27 –29, 31 –34, 36, 37, 40 –42, 44 – 47, 49, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yao et al. (Yao, US Patent No. 5,983,099) in view of Maher et al. (US Patent No. 6,647,020).

Regarding claims 1 and 27, Yao teaches of in a communication device, a method and device for reducing latency during a new call set-up in a group communication network (column 6, lines 1 – 6), comprising: receiving a floor-control request from a user of the communication device who wishes to initiate a new group call (starting column 6, line 66 and ending column 7, line 12), the communication device having released its traffic channel of the supporting wireless network (column 10, lines 5 –22 and column 10, lines 52 –56; note that as the communication is initiating a call and hence has no dedicated traffic channel as noted for example in column 8, lines 15 –20); and transmitting [the floor-control request] on a reverse common channel of the wireless network to a controller (column 7, lines 21 – 39 and further in column 6, lines 31 – 55 and starting column 9, line 65 and ending column 10, line 4).

Yao does not specifically teach of encapsulating the received floor request in an Internet protocol (IP) datagram suitable for transmission via the Internet; and a corresponding group communication controller via the Internet.

In a related art dealing with wireless talk groups, Maher teaches of of encapsulating the received floor request in an Internet protocol (IP) datagram suitable for transmission via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44); and a corresponding group communication controller via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44).

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It would have been obvious to one skilled in the art at the time of invention to have included into Yao's accelerated response group communication system, Maher's talk group implementation in an IP network, for the purposes of developing, refining, and taking advantage of communication architectures using IP multicasting with respect to group calls, as taught by Maher.

Regarding claim 14, this claim is directed to a computer readable medium performing the method and functions of the system of claims 1 and 27 and is thus rejected for the same reasons as per claims 1 and 27.

Regarding claim 40, Yao teaches of in a communication device, a method and device for reducing latency during a new call set-up in a group communication network (column 6, lines 1 – 6), comprising: a receiver (for example, column 10, lines 5 – 39) and a transmitter (for example, column 10, line 5 – 39) and a processor communicatively coupled to the receiver and the transmitter (for example, column 10, lines 5 – 39), the processor being capable of: receiving a floor-control request from a user of the communication device who wishes to initiate a new group call (starting column 6, line 66 and ending column 7, line 12), the communication device having released its traffic channel of the supporting wireless network (column 10, lines 5 – 22 and column 10, lines 52 – 56; note that as the communication is initiating a call and hence has no dedicated traffic channel as noted for example in column 8, lines 15 – 20); and transmitting [the floor-control request] on a reverse common channel of the wireless network to a controller (column 7, lines 21 – 39 and further in column 6, lines 31 – 55 and starting column 9, line 65 and ending column 10, line 4).

Yao does not specifically teach of encapsulating the received floor request in an Internet protocol (IP) datagram suitable for transmission via the Internet and a corresponding group communication controller via the Internet.

In a related art dealing with wireless talk groups, Maher teaches of of encapsulating the received floor request in an Internet protocol (IP) datagram suitable for transmission via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44); and a corresponding group communication controller via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao's accelerated response group communication system, Maher's talk group implementation in an IP network, for the purposes of developing, refining, and taking advantage of communication architectures using IP multicasting with respect to group calls, as taught by Maher.

Regarding claims 2, 15, 28, and 41, Yao, in view of Maher, teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of wherein the receiving includes receiving the floor-control request through a push-to-talk (PTT) device (starting column 9, line 65 and ending column 10, line 4).

Regarding claims 3, 16, 29, and 42, Yao, in view of Maher, teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of wherein the transmitting includes transmitting the floor control request on a reverse access channel (RACH) of the wireless network (column 7, lines 2 – 12).

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Regarding claim 5, 18, 31, and 44, Yao, in view of Maher, teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of including re-establishing traffic channel for the communication device (column 10, lines 51 – 56).

Regarding claims 6, 19, 32, and 45, Yao, in view of Maher, teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of including re-establishing traffic channel for the communication device simultaneously with the transmitting the floor-control request (column 10, lines 51 – 56).

Regarding claims 7, 20, 33, and 46, Yao, in view of Maher, teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of including renegotiating a radio link protocol (RLP) for the communication device (column 7, lines 24 – 56).

Regarding claims 8, 21, 34, and 47, Yao, in view of Maher, teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of including renegotiating a radio link protocol (RLP) for the communication device simultaneously with the transmitting the floor-control request (column 7, lines 24 – 56).

Regarding claims 10, 23, 36, and 49, Yao, in view of Maher, teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of further including receiving a response to the floor-control request on a forward common channel of the wireless network (column 7, lines 21 – 39).

Regarding claim 11, 24, 37, and 50 Yao, in view of Maher, teach all the claimed limitations as recited in claims 10, 23, 36, and 49. Yao further teaches of wherein the receiving the response includes receiving the response on a forward paging channel (F-PCH) of the wireless network (column 10, lines 5 – 22).

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6. Claims 4, 17, 30, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yao et al (Yao, US Patent No. 5,983,099) in view of Maher et al. (US Patent No. 6,647,020) as applied to claims 1, 14, 27, and 40 above, and further in view of Pan et al. (Pan, US Patent No. 6,308,079).

Regarding claims 4, 17, 30, and 43, Yao in view of Maher teach all the claimed limitations as recited in claims 1, 14, 27, and 40. Yao further teaches of wherein the transmitting includes transmitting the floor control request on a reverse access channel (R-ACH) of the wireless network (column 7, lines 2 – 12).

Yao in view of Maher do not specifically teach of [wherein the transmitting includes transmitting the floor control request on] a reverse enhanced access channel (R-EACH) [of the wireless network] (note that a R-EACH is used in cdma2000).

In a related art dealing with talk group call in a wireless system, Pan teaches the use of a group call in a cdma2000 environment and thus obviously [wherein the transmitting includes transmitting the floor control request on] a reverse enhanced access channel (R-EACH) [of the wireless network] (column 3, lines 34 – 50).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao and Maher's accelerated response IP group communication system, Pan's cdma 2000 structure, for the purposes of migration to the next generation of services, as taught by Pan.

7. Claims 9, 12, 13, 22, 25, 26, 35, 38, 39, 48, 51, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yao et al (Yao, US Patent No. 5,983,099) in view of Maher et al. (US Patent No. 6,647,020) as applied to claims 1, 14, 27, and 40 and

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10, 23, 36, and 49 above, and further in view of Gu et al. (Gu, International Application, WO 99/53631).

Regarding claims 9, 22, 35, and 48, Yao in view of Maher teach all the claimed limitations as recited in claims 1, 14, 27, 40. Yao further teaches of wherein the transmitting includes transmitting the floor control request (starting column 6, line 66 and ending column 7, line 12).

Yao in view of Maher do not specifically teach of [wherein the transmitting includes transmitting the floor control request] in short data burst (SDB) form.

In a related art dealing with the transmission of user data on the reverse common channel, Gu teaches of [wherein the transmitting includes transmitting the floor control request] in short data burst (SDB) form (page 3, lines 2 – 4 and page 6, lines 11 - 22).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao and Maher's accelerated response IP group communication system, Gu's short data burst form, for the purposes of ensuring a high quality transmission, response time, and gain rate, as taught by Gu.

Regarding claim 12, 25, 38, 51, Yao in view of Maher teach all the claimed limitations as recited in claims 10, 23, 36, and 49. Yao in view of Maher do not specifically teach of wherein the receiving the response includes receiving the response on a forward common control channel (F-CCCH) of the wireless network.

In a related art dealing with the transmission of user data on the reverse common channel, Gu teaches of wherein the receiving the response includes receiving the response on a forward common control channel (F-CCCH) of the wireless network (starting page 5, line 19 and ending page 6, lines 3).

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It would have been obvious to one skilled in the art at the time of invention to have included into Yao and Maher's group call method, Gu's short data burst form, for the purposes of ensuring a high quality transmission, response time, and gain rate, as taught by Gu.

Regarding claims 13, 26, 39, and 52, Yao in view of Maher teach all the claimed limitations as recited in claims 10, 23, 36, and 49. Yao in view of Maher do not specifically teach of wherein the receiving the response includes receiving the response in short data burst (SDB) form.

In a related art dealing with the transmission of user data on the reverse common channel, Gu teaches of wherein the receiving the response includes receiving the response in short data burst (SDB) form (page 16, lines 13 – 21 and page 9, lines 9 – 12).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao and Maher's group call method, Gu's short data burst form, for the purposes of ensuring a high quality transmission, response time, and gain rate, as taught by Gu.

8. Claims 53 – 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yao et al. (Yao, US Patent No. 5,983,099) in view of Maher et al. (US Patent No. 6,647,020) as applied to claims 1,14, 27, and 40 above, and further in view Sexton et al. (Sexton, US Patent Application Publication, US2002/0159433).

Regarding claims 53 – 56, Yao in view of Maher teach all the claimed limitations as recited in claims 1,14, 27, and 40. Yao in view of Maher do not specifically teach of wherein the transmitting includes transmitting the floor-control request, which is smaller than a predetermined size, in short data burst (SDB) form.

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In a related art dealing with packet data systems in radio communications, Sexton teaches of wherein the transmitting includes transmitting the floor-control request, which is smaller than a predetermined size, in short data burst (SDB) form (paragraph 0017).

It would have been obvious to one skilled in the art at the time of invention to have included into accelerated response IP group communication system, Sexton's size criteria, for the purposes of assuring the quality of transmissions, as taught by Sexton.

9. Claims 57 –60 are rejected under 35 U.S.C. 103(a) as being unpatentable over as Yao et al (Yao, US Patent No. 5,983,099) and Maher et al. (US Patent No. 6,647,020) and further in view Sexton et al. (Sexton, US Patent Application Publication, US2002/0159433).

Regarding claims 57 and 59, Yao teaches of a method and device for reducing latency during a new call setup in a group communication network (column 6, lines 1 – 6), comprising: receiving a floor-control request from a user of the communication device who wishes to initiate a new group call (starting column 6, line 66 and ending column 7, line 12) the communication device having released its traffic channel of the supporting wireless network (column 10, lines 5 –22 and column 10, lines 52 –56; note that as the communication is initiating a call and hence has no dedicated traffic channel as noted for example in column 8, lines 15 –20); transmitting on a reverse common channel of the wireless network to a controller (column 7, lines 21 – 39 and further in column 6, lines 31 – 55 and starting column 9, line 65 and ending column 10, line 4); re-establishing the traffic channel for the communication device simultaneously with the [floor control request] (column 10, lines 51 – 56) and renegotiating a radio link protocol (RLP) for the

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communication device simultaneously with the [floor control request] (column 7, lines 24 – 56).

Yao does not specifically teach of packaging the received floor-control request in an Internet protocol (IP) datagram suitable for transmission via the Internet; a controller via the Internet; of determining whether the IP datagram is smaller than the predetermined size; transmitting the IP datagram, which is smaller than the predetermined size, as a short data burst; [re-establishing the traffic channel for the communication device simultaneously with the] transmitting the IP datagram; or [renegotiating a radio link protocol (RLP) for the communication device simultaneously with the] transmitting the IP datagram (note that the brackets are used for clarity in language and that it is believed these limitations have been addressed in the above cited art).

In a related art dealing with wireless talk groups, Maher teaches of packaging the received floor-control request in an Internet protocol (IP) datagram suitable for transmission via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44); a controller via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44); [re-establishing the traffic channel for the communication device simultaneously with the] transmitting the IP datagram (column 3, lines 17 –36 and column 8, lines 14 –44); or [renegotiating a radio link protocol (RLP) for the communication device simultaneously with the] transmitting the IP datagram (column 3, lines 17 –36 and column 8, lines 14 –44).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao's accelerated response group communication system, Maher's talk group implementation in an IP network, for the purposes of developing, refining, and

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taking advantage of communication architectures using IP multicasting with respect to group calls, as taught by Maher.

Yao and Maher do not specifically teach of determining whether the IP datagram is smaller than the predetermined size; and transmitting the IP datagram, which is smaller than the predetermined size, as a short data burst.

In a related art dealing with packet data systems in radio communications, Sexton teaches of determining whether the IP datagram is smaller than the predetermined size (paragraph 0017); and transmitting the IP datagram, which is smaller than the predetermined size, as a short data burst (paragraph 0017).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao and Maher(s)' group call systems, Sexton's size criteria, for the purposes of assuring the quality of transmissions, as taught by Sexton.

Regarding claim 58, this claim is directed to a computer readable medium performing the method and functions of the system of claims 57 and 59 and is thus rejected for the same reasons as per claims 1 and 27.

Regarding claim 60, Yao teaches of a communication device for reducing latency during a new call setup in a group communication network (column 6, lines 1 – 6), comprising: a receiver (for example, column 10, lines 5 – 39) and a transmitter (for example, column 10, line 5 – 39) and a processor communicatively coupled to the receiver and the transmitter (for example, column 10, lines 5 – 39), the processor being capable of: receiving a floor-control request from a user of the communication device who wishes to initiate a new group call (starting column 6, line 66 and ending column 7, line 12) the communication device having released its traffic channel of the supporting

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wireless network (column 10, lines 5 –22 and column 10, lines 52 –56; note that as the communication is initiating a call and hence has no dedicated traffic channel as noted for example in column 8, lines 15 –20); transmitting on a reverse common channel of the wireless network to a controller (column 7, lines 21 – 39 and further in column 6, lines 31 – 55 and starting column 9, line 65 and ending column 10, line 4); re-establishing the traffic channel for the communication device simultaneously with the [floor control request] (column 10, lines 51 – 56) and renegotiating a radio link protocol (RLP) for the communication device simultaneously with the [floor control request] (column 7, lines 24 – 56).

Yao does not specifically teach of packaging the received floor-control request in an Internet protocol (IP) datagram suitable for transmission via the Internet; a controller via the Internet; of determining whether the IP datagram is smaller than the predetermined size; transmitting the IP datagram, which is smaller than the predetermined size, as a short data burst; [re-establishing the traffic channel for the communication device simultaneously with the] transmitting the IP datagram; or [renegotiating a radio link protocol (RLP) for the communication device simultaneously with the] transmitting the IP datagram (note that the brackets are used for clarity in language and that it is believed these limitations have been addressed in the above cited art).

In a related art dealing with wireless talk groups, Maher teaches of packaging the received floor-control request in an Internet protocol (IP) datagram suitable for transmission via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44); a controller via the Internet (column 3, lines 17 –36 and column 8, lines 14 –44); [re-establishing the traffic channel for the communication device simultaneously with the]

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transmitting the IP datagram (column 3, lines 17 –36 and column 8, lines 14 –44); or [renegotiating a radio link protocol (RLP) for the communication device simultaneously with the] transmitting the IP datagram (column 3, lines 17 –36 and column 8, lines 14 – 44).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao's accelerated response group communication system, Maher's talk group implementation in an IP network, for the purposes of developing, refining, and taking advantage of communication architectures using IP multicasting with respect to group calls, as taught by Maher.

Yao and Maher do not specifically teach of determining whether the IP datagram is smaller than the predetermined size; and transmitting the IP datagram, which is smaller than the predetermined size, as a short data burst.

In a related art dealing with packet data systems in radio communications, Sexton teaches of determining whether the IP datagram is smaller than the predetermined size (paragraph 0017); and transmitting the IP datagram, which is smaller than the predetermined size, as a short data burst (paragraph 0017).

It would have been obvious to one skilled in the art at the time of invention to have included into Yao and Maher(s)' group call systems, Sexton's size criteria, for the purposes of assuring the quality of transmissions, as taught by Sexton.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-

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3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


Tanmay S Lele
Examiner
Art Unit 2684


NAY MAUNG
SUPERVISORY PATENT EXAMINER

tsl
April 7, 2004